

Partial Translation of Reference 4

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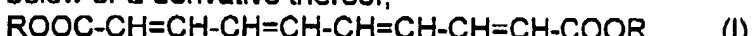
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[Claim 1] A cosmetic comprising any of tetraenedicarboxylic acids of general formula I below or a derivative thereof,



wherein R represents hydrogen, a linear or branched alkyl, an alkenyl, an aryl, an alkali metal, an alkaline earth metal or an amine.

[Claim 2] The cosmetic according to claim 1, wherein the tetraenedicarboxylic acid derivative is contained in an amount of 0.01 to 10% by weight based on the total amount of the cosmetic.

(Example 1 and Comparative Example 1) Lotions indicated in Table 1 were prepared. These lotions were applied to panelists and exposed to sunlight. The erythemogenic minimum exposure dose at sample lotion application areas and the erythemogenic minimum exposure dose at non-application areas were determined, and SPF (sun protection factor) was calculated from the ratio thereof. The results are also shown in Table 1.

[0023]

[Table 1]

Lotion (wt.%)	Example 1	Comp.Ex. 1
Disodium decatetraenedicarboxylate	1.0	-
Sodium 2-hydroxy-4-methoxybenzophenone-5-sulfonate	-	1.0
Propylene glycol	10.0	10.0
Ethyl alcohol	20.0	20.0
Liquid paraffin	2.0	2.0
POE(30) hardened castor oil	1.0	1.0
Polyethylene glycol	5.0	5.0
Citric acid	0.2	0.2
Sodium phosphate	0.3	0.3
EDTA-2Na	0.05	0.05
Perfume	0.1	0.1
Purified water	balance	balance
SPF	5.0	2.0

Table 1 shows that the SPF of the lotion of Example 1 mixed with disodium decatetraenedicarboxylate was 5.0 while the SPF of the lotion of Comparative Example 1 mixed with sodium 2-hydroxy-4-methoxybenzophenone-5-sulfonate was 2.0. Namely, the lotion of Example 1 mixed with disodium decatetraenedicarboxylate exhibited a superior ultraviolet screening effect. Further, this lotion did not cause any skin irritancy.